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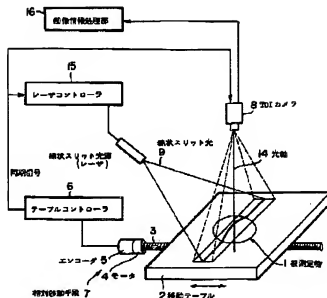
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APPLICANT : TORAY IND INC;

INVENTOR : HAYASHI MUTSUMI;

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TITLE : IMAGE FORMATION OUTPUT APPARATUS AND METHOD, AND SHAPE MEASURING APPARATUS AND METHOD



ABSTRACT : PROBLEM TO BE SOLVED: To carry out measurement at high speed using a simple optical system by relatively moving a measuring part and an object to be measured and measuring the image information in an intermittent visual field illuminated by a linear slit light source.

SOLUTION: A movable table 2 in which an object 1 to be measured is fixed is moved in a prescribed direction by a screw 3 driven by a motor 4. The motor 4 is provided with an encoder 5 which can detect and control the position of the table 2 moved by the screw 3. A time delay integration type TDI camera 8 is so installed above the object 1 to be measured as to make the optical axis 14 vertical to the object 1 to be measured. A laser is used as the linear slit light source 10 and light beam is slit in a narrow width by an optical system and radiated to the center part of the visual field of the camera 8. A laser controller 15 controls on and off of the laser light and the pulse lighting time of the laser is made to be equal to the line shift time of the camera 8 and the interval of the lighting is determined based on the interval of a necessary optical cutting plane line.

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